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(74) Common Representative: CIBA SPECIALTY CHEMICALS HOLDING INC.; Klybeckstrasse 141, CH-4057 Basel (CH).

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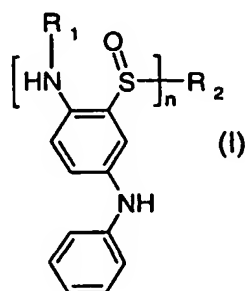
(75) Inventors/Applicants (*for US only*): MEIER, Hans-Rudolf [CH/CH]; Muespacherstrasse 74, CH-4055 Basel (CH). KNOBLOCH, Gerrit [DE/CH]; Im Stigler 25, CH-4312 Magden (CH).

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GRAFTABLE 4-AMINO-3-SULFINYL-SUBSTITUED DIPHENYLAMINE STABILIZERS FOR VULCANIZATES



(57) Abstract: Compounds of the formula (I) wherein R<sub>1</sub> is C<sub>1</sub>-C<sub>18</sub>alkyl, C<sub>5</sub>-C<sub>12</sub>-cycloalkyl, phenyl, benzyl, or allyl; n is 1 or 2; if n is 1, R<sub>2</sub> is C<sub>4</sub>-C<sub>18</sub>alkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, aryl or heteroaryl, benzyl, allyl, (CH<sub>2</sub>)<sub>m</sub>COOR<sub>3</sub>, or is (CH<sub>2</sub>)<sub>m</sub>CN; if n is 2, R<sub>2</sub> is -S-(CH<sub>2</sub>)<sub>p</sub>-S or -S-(CH<sub>2</sub>)<sub>2</sub>-[O-(CH<sub>2</sub>)<sub>2</sub>]<sub>m</sub>-S R<sub>3</sub> is C<sub>1</sub>-C<sub>18</sub>alkyl, benzyl, allyl; m is 1 or 2; and p is a number from 2 to 12; are suitable as a stabiliser for an elastomer to prevent oxidative, thermal, dynamic, light-induced and/or ozoneinduced degradation. They are also suitable as stabilizers for elastomers to prevent contact discoloration of substrates coming into contact with elastomers.

# INTERNATIONAL SEARCH REPORT

National Application No

PCT/EP 03/10836

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7 C08K5/41 C08K5/372 C07C317/36 C07C323/36

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08K C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data, BEILSTEIN Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01 29126 A (MEIER HANS RUDOLF ;EVANS SAMUEL (CH); KNOBLOCH GERRIT (CH); CIBA S) 26 April 2001 (2001-04-26) examples	1-10
X	WO 02 42262 A (ODENS HERMAN H ;FLEXSYS AMERICA LP (US); KATRITZKY ALAN R (US); MA) 30 May 2002 (2002-05-30) cited in the application examples; table 3	7
A	----- -/--	1-6,8-10

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>KATRITZKY A R ET AL: "Novel Syntheses of 2,3-dihydro-1,5-benzothiazepin-4(5H)-ones and 2H-1,4-Benzothiazin-s(4H)-ones" JOURNAL OF ORGANIC CHEMISTRY, AMERICAN CHEMICAL SOCIETY. EASTON, US, vol. 66, no. 20, 9 August 2001 (2001-08-09), pages 6792-6796, XP002222564  ISSN: 0022-3263  pg 6794, Scheme 3; Table 1; 2a-f  pg 6795, Scheme 4; Table 2; 4a-f  -----</p>	7
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PCT/EP 03/10836

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